Shams Syed

Machine Learning Engineer | Location: TX | Mobile: 9453581626 | Email: shams.syed0525@gmail.com

SUMMARY:

Machine Learning Engineer with 4+ years of practical experience in building, training, and deploying AI/ML solutions across cloud and on-premise environments. Skilled in developing models using Python, R, C++, and Java, and proficient with frameworks like PyTorch, TensorFlow, Keras, and Scikit-learn. Hands-on expertise in deep learning architectures, including CNNs, RNNs, LSTMs, and GANs, along with NLP solutions powered by BERT, GPT, spaCy, and NLTK. Experienced in generative AI for text creation, image generation, and synthetic data augmentation using GANs, VAEs, and diffusion models. Strong knowledge of significant data ecosystems (Hadoop, Spark, Kafka) and deployment on AWS, Azure, and Google Cloud. Passionate about applying data-driven strategies and cutting-edge AI techniques to solve complex problems and deliver measurable business value.

SKILLS:

Methodology: SDLC, Agile, Waterfall

Programming Languages: Python, R, C++, Java

Machine Learning Frameworks: TensorFlow, PyTorch, Keras, Scikit-learn, Hugging Face Transformers

Deep Learning: CNNs, RNNs, LSTM, GANs, VAEs, Diffusion Models **Natural Language Processing:** BERT, GPT, spaCy, NLTK, Llama, Roberta

Data Management: SQL, MongoDB, Cassandra, HBase

Generative AI: Text generation, image synthesis, data augmentation, prompt engineering, fine-tuning large language models

Big Data Technologies: Apache Hadoop, Spark, Kafka

Cloud Platforms: AWS, Google Cloud, Azure, Vertex AI, AWS SageMaker

Data Visualization: Tableau, Power BI

Model Deployment and MLOps: Docker, Kubernetes, CI/CD pipelines, MLflow, TFX

EDUCATION:

Masters in Information Technology

May 2024

July 2021

University of the Cumberland, USA

Bachelor of Computer Science

Lords Institute of Engineering and Technology

EXPERIENCE:

Genworth, TX | June 2024 – Current | Machine Learning Engineer

- Collaborated with cross-functional teams to plan and execute machine learning projects under Agile/Scrum methodology, supporting sprint planning, daily standups, and retrospectives to improve delivery efficiency 10%.
- Contributed to end-to-end development of machine learning models using TensorFlow and PyTorch, optimizing algorithms and data workflows to boost model efficiency by 20%.
- Implemented text generation pipelines leveraging GPT-3 and LLaMA, increasing content automation by 40% for client marketing campaigns.
- Developed and fine-tuned diffusion-based image synthesis models, reducing design turnaround time by 30%while ensuring high-quality creative outputs.
- Created interactive Tableau dashboards by integrating multiple data sources, enabling clearer insights and datadriven decisions for stakeholders.
- Applied advanced prompt engineering techniques for large language models, improving chatbot response accuracy by 25% and enhancing user experience.
- Improved data workflows and query performance using SQL and MongoDB, achieving a 15% reduction in data retrieval times.
- Assisted with CI/CD pipelines and supported ML model deployments on AWS/GCP, ensuring smooth, scalable, and production-ready releases.

Infinite Infolab, India | Dec 2019 - June 2022 | Machine Learning Engineer

- Optimized ML models with Keras and Scikit-learn, applying parameter tuning and cross-validation to reduce processing time by 30%.
- Applied LSTM and GANs in predictive analytics, leveraging sequence modeling and synthetic data generation to boost customer retention by 40%.
- Advanced NLP tasks with spaCy and NLTK, enhancing data cleaning and feature engineering to achieve a 35% rise in extraction accuracy.
- Administered Big Data operations using Hadoop, Spark, and Kafka, constructing efficient pipelines to speed up data processing by 50%.
- Led data augmentation initiatives using synthetic data generation techniques, enhancing model robustness and improving performance on low-resource datasets by 15%.
- Fine-tuned transformer-based large language models for domain-specific applications, resulting in a 20% boost in task-specific performance for enterprise clients.
- Oversaw Azure-based infrastructures, improving scalability and performance for a 45% uptick in data throughput.
- Implemented robust Kubernetes and CI/CD solutions, introducing consistent testing and monitoring for a 50% gain in deployment reliability.
- Implemented generative AI workflows for text and image synthesis, streamlining content creation processes and saving 50 hours of manual effort per project.
- Maintained version control with Git, instituting branching strategies to cut code conflicts by 25%.
- Designed and scaled database solutions with Cassandra and HBase, ensuring 40% enhanced data scalability.
- Drove data visualization using Power BI, delivering intuitive dashboards that improved decision-making by 33%.